

Remarks

Claims 11 and 20 are amended. Claims 11 to 20 are pending in this application of which claims 11 and 20 are in independent form.

Applicants' independent claims 11 and 20 were rejected under 35 USC 102(b) as being unpatentable over Kato et al. The following will show that claims 11 and 20 patentably distinguish the applicants' invention over this reference.

The wording of applicants' claims filed in response to the first Office action was open to an interpretation that a measurement of the degree of displacement is equivalent to the determination of the spring constant or the quantity characterizing the spring constant.

As set forth in the remarks of the applicants' previous amendment, the situation can occur that the degree of displacement of the operator-controlled element, which is determined by means of the sensor, can no longer be reliably allocated to the operator-controlled function wanted by the driver because of wear and temperature drift of the sensor for determining the degree of displacement of the operator-controlled element as well as a dependency upon bearing play and deformation especially of plastic parts of the operator-controlled element. For this reason, in claims 11 and 20, the operator-controlled function of the operator-controlled element is no longer determined in dependence upon the measured degree of displacement of the operator-controlled element but rather, in dependence upon

the determined spring constant or the determined quantity characterizing the spring constant. In this way, a reliable allocation of the instantaneous or prevailing degree of displacement of the operator-controlled element can be established to the operator-controlled element wanted by the driver. This is the case because the allocation to the operator-controlled function wanted by the driver does not proceed any more from a degree of displacement of the operator-controlled element determined by the sensor so that the above-mentioned sources of error can be precluded; instead, the allocation of the instantaneous or prevailing degree of displacement to the operator-controlled function wanted by the driver is carried out in claims 11 and 20 by the spring constant, which is determined utilizing the instantaneous or prevailing degree of displacement, or the quantity characterizing the spring constant. The determination of these spring constants is then independent of the above-mentioned sources of error.

In view of the foregoing, applicants have amended independent claims 11 and 20 to emphasize this relationship with greater clarity. Thus, the pertinent clauses of claim 11 now read as set forth below:

"determining a quantity which characterizes the spring constant prevailing at the actual degree of displacement; and,

detecting at least one of said operator-controlled functions of the operator-controlled element in dependence upon said determined quantity which characterizes the spring constant."

As the applicants have already argued, neither Kato et al

nor Kuretake makes any suggestion as to the determination of a quantity characterizing the spring constant acting with the then present or prevailing degree of displacement or the detection of at least one of the operator-controlled functions of the operator-controlled element in dependence upon the determined quantity characterizing the spring constant. Instead, in Kato et al and Kuretake, only the degree of displacement of the accelerator pedal itself is disclosed.

The determination of the degree of displacement of the operator-controlled element is, however, affected by the above-mentioned error sources of wear and temperature drift of the sensor for determining the degree of displacement of the operator-controlled element as well as by the bearing play and deformation, especially the deformation of plastic parts of the operator-controlled element, so that an adjustment or balancing of the sensor is required for the determination of the degree of displacement of the operator-controlled element as is known, for example, from Kato et al. Such a balancing or adjustment is avoided with the applicants' invention.

Claim 20 parallels claim 11 in an apparatus context and has been amended in the same manner. Accordingly, both claims 11 and 20 should now patentably distinguish the applicants' invention over Kato et al and be allowable. Claims 12 to 19 are all dependent from claim 11 so that these claims should now too be allowable.

Reconsideration of this application is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Walter Ottesen". The signature is fluid and cursive, with a long horizontal stroke at the end.

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